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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,629	12/23/2005	Han-Gyu Yang	LNK-0120	7725
23413 7590 03/04/2008 CANTOR COLBURN, LLP 20 Church Street 22nd Floor Hartford, CT 06103				
EXAMINER FAN, HONGMIN				
ART UNIT PAPER NUMBER 2612				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/562,629

**Applicant(s)**

YANG ET AL.

**Examiner**

HONGMIN FAN

**Art Unit**

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 1/20/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4 and 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4, 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: line 23, "... for charging a battery ..." should be – ...for charging the battery ... --.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (KR 10-0373769) in view of Dittmer (US Pub. 2003/0146843), further in view of Fahey et al (US 4259548).

As to claim 1, referring to Fig. 1-4, Yang disclosed a disaster prevention system comprising a sensor 110, a repeater 200 with a first display 212 for relaying a fire alarm, a code analysis processing unit 312 (i.e. fire occurrence detecting unit), a signal processing unit 300 having a controller 314, a memory 318 and a second display 316, wherein the controller determines whether the received code matches the code stored in the memory 318, and if they coincide with each other, the controller will generate a fire alarm through the second display unit 316. The system further comprises a first power line communications interface unit (214) interfacing the output signal of the

carrier wave transmitter in the commercial AC source of the power line and transmits, or interfaces the signal of the carrier wave loaded to the power line on the contrary in the commercial AC source of the power line (i.e. mixed with AC power) (¶22, line 1-5, English translation). The system further comprises a second power line communications interface unit (302) which interfaces and receives the signal of the carrier wave loaded to the power line (¶22, line 12-16, English translation).

Yang further disclosed a DC power supply unit (216) for supplying the necessary DC power supply to the power line in the power outage due to the fire to the transmission of the fire signal (¶20, English translation).

Yang did not explicitly disclose the DC power supply having a battery, a rectifier, a step-down transformer and a charging circuit for charging the battery. However, it is well known in the art to have these components in order to provide power due to power outage. Referring to Fig. 1, Fahey et al teach an apparatus for monitoring and signaling system comprising a standby battery SB which is of a rechargeable type (col. 107, line 11-12), a charging circuit including a stepdown transformer ST and a full-wave bridge rectifier circuit 150 (col. 107, line 33-48). Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to incorporate a battery, a rectifier, a step-down transformer and a charging circuit for charging the battery in Yang's system in order to provide power to the system due to power outage

Yang did not disclose a fire fighting device. However, it is well known in the art to equip a fire fighting device with a fire alarm system. Dittmer teaches a system for controlling a fire-extinguishing system wherein if at least one alarm threshold is

reached, the fire-extinguishing device is activated (Abstract, line 4-6). Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to incorporate a fire fighting device in Yang's system in order to extinguish the fire automatically.

As to claim 2, Dittmer teaches the mechanism for triggering the extinction process, for example a fire-alarm valve station, is connected to fire-alarm system 2 via signal lines 13 (0063, line 7-9).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang in view of Dittmer, further in view of Fahey et al, further in view of Garton et al (US 5134644) and Boddey et al (US 4805519).

As to claim 4, Yang did not disclose additional fire-resistant cable. However, it is known in the art to use additional line for redundancy and use fire resistant cable to protect from fire damage. Referring to Fig. 1, Garton et al teach a data communication device having additional communication line, while Boddey et al teach a control system having a fire-resistant signal cable (col. 4, line 60-62). Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to incorporate an additional fire-resistant signal cable in order to provide redundancy while protect it from fire damage.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang in view of Dittmer, further in view of Fahey et al, further in view of Morales (US 6215404) and Seales et al (US Pub. 2003/0184436).

Yang did not disclose a telephone number DB and a voice memory. However, it is known in the art to automatically dial a telephone number in order to inform relevant party and to use voice message to identify the location of the sensed event. Morales teach a fire alarm monitoring system wherein the telephone number of the fire department is stored in the database and associated with the characteristic tone stored for the fire alarm. When the fire alarm is detected, PC 14 automatically invokes its communication protocol and dials fire department, providing a standardized message in a digital voice form to the fire department 22, noting that the fire alarm at the premises has sounded (col. 4, line 29-36). Seales et al teach a security system using voice message to identify a location of the base unit (i.e. sensor) (claim 4). Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to incorporate auto dialer with a telephone database and voice identification in Yang's system in order to notify relevant party.

### ***Response to Arguments***

Applicant's arguments with respect to claims 12 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hongmin Fan whose telephone number is 571-272-2784. The examiner can normally be reached on Monday - Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HF

/Davetta W. Goins/

Primary Examiner, Art Unit 2612